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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,532	07/07/2003	Debendra Das Sharma	10002505-2	8210

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HEWLETT-PACKARD COMPANY  
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P.O. Box 272400  
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EXAMINER

BAKER, STEPHEN M

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/615,532

**Applicant(s)**

SHARMA, DEBENDRA DAS

**Examiner**

Stephen M. Baker

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-5,7-9 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,4,7,9,12-14,16,17 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 5,8,15 and 18-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. Figures 1 and 3A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. This is based on the specification's description of Figures 1, 2 and 3A as being representative of a "current" arrangement. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because an "ECC encoder" and an "ECC decoder" *per se* are not shown, as Figures 5B and 5C merely show an "encoding process" and a "decoding process," and do not necessarily specify a single encoder or a single decoder. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

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and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities: in paragraph 0028, "flowcharts illustrating process using the ECCs" is not idiomatic English.

Appropriate correction is required.

### ***Claim Objections***

4. Claims 3-5, 7-9, 12-17 and 21-23 are objected to because of the following informalities:

Regarding claims 3-5, 7-9, 12-17 and 21-23, "first ECC code" and "second ECC code" are considered vague if expected to distinguish between two different types of ECC coding, as an ECC codeword is often referred to as an "ECC code."

Consequently, "first ECC code" and "second ECC code" apparently should be "first type of ECC code" and "second type of ECC code" or the like. The term "packet" is usually

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reserved for independently-addressable data units, and applicant's "packets" apparently are not independently-addressable data units.

Regarding claims 3 and 23: "ECC encoder" apparently should be "ECC encoding process" and "decoder" apparently should be "decoding process," given the disclosure as it currently stands

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 13, 16 and 17, "claim 10" apparently should be "claim 12" as applicant is once again reminded that claim 10 has been cancelled.

### ***Allowable Subject Matter***

6. Claims 5, 8, 15 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The indicated allowability of claims 3, 4, 7, 9, 12-14, 16, 17 and 21-23 is withdrawn in view of the newly discovered reference to Saito *et al.* Rejections based on the newly cited reference follows.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 3, 4, 9, 12-14, 17 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,850,519 to Saito *et al* (hereafter "Saito").

Saito discloses arrangements for communicating MPEG4-over-IP on a radio link. Saito's network of terminals and a WWW server provide a "computer system." Each of Saito's fragments is a "packet," with the first fragment (802) serving as a "header packet" and remaining fragments (803, 804) serving as "data packets" (col. 10, lines 48+). A stronger FEC serving as a "first ECC code" is used for the header and other data within the "header packet" and a weaker FEC serving as a "second ECC code" is used for the data in the "data packets" (col. 9, lines 53+). Saito's fragmented message transmission is a "transaction" in the trivial sense of being an exchange of data.

Regarding claims 4, 13 and 14, the "second ECC code" is provided for each of the "data packets," including the last of the "data packets."

Regarding claims 9 and 17, the ECC codewords of the first through third packets serve as first through third ECC codes.

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Regarding claims 21 and 22, as the header fragment (i.e. packet) ECC is stronger than the ECC used in the remaining fragments, the header fragment ECC is presumably capable of correcting more than one error and is thus capable of correcting a single error and detecting a double error.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito.

Saito does not specify particular error correction capacities for the ECCs and hence does not specify a code capable of detecting a double error. Saito's codes presumably can correct at least a single error and thus can be considered to provide ECC codes with an "SEC" capacity. Official notice is taken that the advantages of using an ECC code that is capable of detecting (and correcting) more than one error in a wireless packet were well known at the time the invention was made. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to implement Saito's ECCs codes such that more than one error per packet (*i.e.* per fragment) can be corrected (and thus detected). Such an implementation would have been obvious because the advantages of using an ECC code that is capable of

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detecting (and correcting) more than one error in a wireless packet were already well known.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Baker whose telephone number is (571) 272-3814. The examiner can normally be reached on Monday-Friday (11:00 AM - 7:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Stephen M. Baker  
Primary Examiner  
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